

Year 2002 Willapa Bay Fishery Management Framework

– Objectives and Intent –

May 2, 2002

From November 1999 through March 2000, representatives of the Washington Department of Fish and Wildlife (WDFW) met with key constituents of the Willapa Bay commercial and recreational fisheries to begin a regional, joint planning process that was intended to be a model for other regional fishery planning efforts. The purpose of those meetings was to lay the foundation for a comprehensive regional fishery management plan specific to Willapa Bay. This effort's results, documented in the "*Year 2000 Willapa Bay Fishery Management Framework* (May 2000)," reflected the progress made toward a long-term plan, including the interim goals established for managing the salmon and sturgeon fisheries in Willapa Bay in the year 2000. The framework plan was updated and again used to guide fisheries in 2001.

This document intends to update the Willapa framework plan for 2002, reflecting discussions recently held with fishers at a March meeting in South Bend and the two North of Falcon meetings in Portland and SeaTac.

Background

The Fish and Wildlife Commission recognized the need for region-specific management plans in February 1999, when fishers from several areas – including Willapa Bay – raised concerns about broad harvest priorities established for various salmon species. Under those statewide priorities, chinook and coho were identified as the primary target species for the recreational fishery and pink, chum and sockeye were identified as the primary target species for the commercial fishery. The objections stemmed from the fact that these statewide priorities did not recognize the lack of pink and sockeye stocks in southwest Washington and the long history of directed chinook and coho fisheries in Willapa Bay, Grays Harbor, the lower Columbia River and the Pacific Ocean. In response, the Commission directed WDFW to initiate a regional planning process in the year 2000.

Willapa Bay was chosen for this initial effort in 2000 for two primary reasons. First, disagreements between fishers and WDFW over pre-season and in-season management decisions in 1999 indicated the need for establishing clear management objectives and guidelines for conducting the region's fisheries. Second, WDFW saw this as an important step toward maintaining and increasing self-sustaining natural spawning populations - while maintaining strong hatchery programs - for the long term benefit of fishers and the ecology of Willapa Bay.

Long-term and short-term goals

From the outset of the 2000 planning process, representatives of WDFW, the commercial fishery and the recreational fishery discussed long-term goals for Willapa Bay that would lead to more sustainable fishing opportunities while providing ecological benefits from both natural and hatchery salmon populations in the basin. Abundant natural spawners, improvements in hatchery programs, accurate assessments of the resource and the ability to adapt to new information and new ideas – these were all elements of the long-term goals discussed by participants at the planning meetings.

At the same time, however, it became clear that the task of developing strategies to achieve these long-term goals could not reasonably be completed in conjunction with the 2000 North of Falcon process, when that year's fishery seasons were established. As a result, participants in the regional planning process began developing short- and long-term goals along parallel tracks. The need continues in 2002 to refine the short-term fishery management framework while necessary steps are identified to develop a more comprehensive watershed plan for Willapa Bay. As a result, for 2002, the primary goal continues to be maintaining important fishery values while incrementally improving protection of existing natural spawning populations.

Some short-term goals adopted for the 2002 fishery may be in place for only one season, while others may help lay the foundation for a long-term plan for the Bay. Although much work remains to be done to complete that foundation, the Department remains committed to improving its work with constituents to establish clear expectations of how fish management decisions will be made in 2002, as defined in this pre-season plan and through its methods for in-season adjustments.

Key 2002 Planning Factors

Two key parameters driving 2002 Willapa fishery management are a relatively low forecast for chinook and a comparatively good forecast for coho. Chinook egg take goals at Willapa facilities have not been met for the past four years. While we hope to remedy part of this problem by improved efficiency in collecting chinook broodstock, Willapa chinook survival rates continue to be low. Future fishing opportunity depends on consistently meeting our chinook management objectives for both hatchery and natural fish. At the same time the Department has committed itself to working with fishers in 2002 to reduce surplus returns of coho to Willapa hatcheries by maximizing hatchery coho harvest while ensuring that chinook and natural coho management objectives are met. This means that we need to use available chinook harvest impacts, to the greatest extent possible, in times and areas when hatchery coho abundance is high. To accomplish this, our discussions with fishers pointed toward using “unstrung coho gear” in the commercial fishery prior to October 1, except during the one-day chinook update. This will allow more fishing time for coho while still harvesting the available chinook. By monitoring chinook impacts in-season, we intend to make in-season adjustments, as necessary, to fishing times and areas in response to chinook catch numbers.

Besides these efforts to harvest additional hatchery coho in 2002, while meeting objectives for natural fish, WDFW is committed to working with local fishers to continue exploring other opportunities to reduce hatchery excesses.

Year 2002 Fisheries Objectives

Salmon Fishery Objectives

- **Natural spawning escapement:** Fisheries will be managed to meet or exceed the interim natural coho and natural chum spawning escapement goals and to afford incremental protection - compared to strictly hatchery harvest rates - for natural-origin chinook spawning escapements. Fisheries will be targeted to take advantage of surplus natural and hatchery fish consistent with this intent.
 - S The natural chum spawning escapement objective is 35,400; target chum fisheries can occur if harvestable numbers are available based on the pre-season or in-season forecast and consistent with maximum allowable impacts on natural coho; chum fisheries will be targeted in times and areas where chum predominate rather than natural coho.
 - S Manage for the interim natural coho escapement objective of 13,100.¹ The estimated natural escapement in the 1999 brood year was 12,832.
 - S Manage for a minimum natural origin chinook escapement of 2,500 and a maximum terminal harvest rate of 32.5%. This target was reduced from the 2,700 escapement target and 37% terminal harvest rate that was used in 2001. The estimated 1998 brood year natural origin escapement was 3,114. A somewhat more conservative approach to terminal chinook management is warranted because escapement objectives for hatchery chinook were not achieved the last four years and the natural origin chinook objective was not met in either 2000 or 2001.
 - S Target harvestable surpluses of hatchery chinook and coho.
- Avoid fishing in times and/or areas where natural chinook or natural coho predominate, i.e., use allowable impacts on natural chinook and natural coho to

¹ This interim natural coho goal is based on an estimated average smolt potential of 425,450, production of 65 smolts per female and an adult sex ratio of 1:1. Further assumptions in this calculation are 500 smolts/sq mi multiplied by the estimated Willapa drainage area of 851 sq mi. The estimate of 500 smolts/sq mi reflects the lower end range for smolt productivity observed in WDFW smolt trapping for other watersheds.

access other harvestable hatchery and natural fish. Given low chinook returns expected in 2002, sufficient chinook impacts will have to be reserved for high coho abundance periods in order to optimize opportunity to harvest surplus hatchery coho. In addition, unstrung gillnets with a maximum 6 inch stretch mesh size and a maximum net depth of 55 meshes will be required prior to October 1 except during the 24 hour chinook update fishery. This restriction may be relaxed depending on the chinook in-season update.

- S Allow additional opportunities through experimental, selective test or evaluation fishing to capture hatchery chinook broodstock (e.g., Naselle) and target hatchery coho or harvestable natural chum while protecting chinook and natural coho.

Such additional opportunities will be considered based on: a) a reasonable likelihood of differentially capturing target species/stocks and/or using an approach that should result in low release mortalities of non-target fish; b) the ability to evaluate the strategy; c) having decision criteria in place to modify the fishery if the strategy does not perform as expected; and d) the Department's ability to monitor the fishery. Consideration of any such fisheries would need to occur by September 1st.

- Avoid disproportionate impact on any segment of natural runs (e.g., early to late run timing segments) to the extent practical.
- **Hatchery production:** Manage for adequate hatchery coho and chinook egg take needs to continue future, programmed hatchery release levels.
 - S The long-term intent is to manage escapement to meet individual facility needs (e.g., note additional efforts at Naselle to do so), but if egg take shortfalls occur in 2002, inter-facility transfers will be allowed within Willapa consistent with provisions of the disease policy.
 - S Egg take needs will be developed through the future brood planning document and may be modified to reflect any agreed changes that might be needed to accommodate eggs needed for such things as increased restoration activities, changes in hatchery operating budget or improvements in hatchery operations.
- **Commercial - areas openings**
 - S Dip-in fishery: Openings will be in Area 2G west of a true north-south line drawn through Willapa Channel Marker 8 and east of a line drawn true south from the most waterward exposed end of the rock jetty located near Washaway Beach.
 - S Chinook update fishery: Opening will be in Areas 2G east of a true north-south

line drawn through Willapa Bay Entrance Daybeacon 11, 2M, 2H west of Willapa Channel Marker 35, and 2J north of a true east-west line drawn through the North Entrance Marker to the Nahcotta boat basin (red flasher #2).

- S Other than the dip-in chinook fishery and the one day chinook update fishery, no additional gillnetting in 2002 will occur in Willapa Bay prior to 6pm September 15.
- S Any coho directed commercial fisheries beginning September 16 through September 30 will use only “unstrung coho gear” with a 6 inch stretch maximum mesh and no more than 55 meshes deep. This restriction may be relaxed depending on the chinook in-season update. Opening will be in Areas 2G east of a true north-south line drawn through Willapa Bay Entrance Daybeacon 11, 2M, 2H west of Willapa Channel Marker 40, and 2J north of a true east-west line drawn through the North Entrance Marker to the Nahcotta boat basin (red flasher #2). Area 2H commercial openings inside of Willapa Channel Marker 40 will be defined based on chinook and coho abundance and allowable impacts in meeting management objectives.
- S Any openings beginning October 1 through October 14 will occur in Areas 2G east of a true north-south line drawn through Willapa Bay Entrance Daybeacon 11, 2M, 2H and 2J north of a true east-west line drawn through the North Entrance Marker to the Nahcotta boat basin (red flasher #2).
- S Chum directed fisheries after October 14: Openings will be in Areas 2G west of a true north-south line drawn through Willapa Channel Marker 10 and east of a line drawn true south from the most waterward exposed end of the rock jetty located near Washaway Beach and excluding the area southerly and easterly of a line from Island Sands Light to Ramsey Point, 2M and 2J north of a true east-west line drawn through the North Entrance Marker to the Nahcotta boat basin (red flasher #2).
- S Two days of commercial fishing opportunity in 2002 will be allowed in Area 2K during the September 15-30 time frame.
- **Recreational rules:** Changes to sport fishing regulations in Willapa Bay compared to 2001 are as follows:
 - S Marine Area 2.1 - no changes from 2001 regulations.
 - S Freshwater areas - North Nemah River - closed the section from the mouth to the Nemah Hatchery to all fishing during August and September due to poaching concerns.

- **Avoiding gear conflicts:** Consistent with Fish and Wildlife Commission Policy, Willapa Bay harvest management objectives are to provide for meaningful opportunities for both commercial and recreational fisheries when they can be directed at healthy wild and hatchery stocks while minimizing impacts on depressed stocks. The 2002 management measures that will be used to meet these joint objectives while minimizing conflicts between commercial and recreational fishers will be as follows:
 - S The marine area recreational opportunity of primary importance appears to be the chinook management window from August 16-September 15. Other than the dip-in chinook fishery and the one day chinook update fishery, no additional gillnetting will occur in Willapa Bay prior to 6pm September 15. In addition, the directed coho net fishery will not occur west of Willapa Bay Entrance Daybeacon 11, avoiding conflicts in the Washaway Beach area.
 - S The Department intends to monitor activities and distribution of both the commercial and recreational fleets throughout the 2002 season, to the extent possible, to develop a better understanding of interactions between these fleets so that the process of identifying and resolving any potential, future gear conflicts can be improved.
 - S Any unanticipated in-season commercial and recreational gear conflicts will be resolved according to the Fish and Wildlife Commission's 2002 North of Falcon policy guidance.
- **Dip-in fishery:** The following guidelines were used for establishing a "dip-in" fishery within Willapa Bay for 2002;
 - S If a proposed dip-in fishery would result in further restricting either the ocean fishery north of Cape Falcon (based on any one of the three ocean options approved for public review at the March Pacific Fishery Management Council (PFMC) meeting), or the Columbia River sport or commercial fishery, PFMC's Salmon Advisory Subpanel (SAS) members representing these interests must agree with the proposed fishery.
 - S Assumption in modeling a fishery will be that 25% of the catch is Willapa Bay stocks and these local impacts will be considered part of allowable terminal harvest rate for Willapa chinook. This will affect later commercial opportunities within Willapa Bay in 2002. The balance of the impacts will be allocated to Columbia River stocks based on the FRAM model output.
 - S The chinook harvest ceiling for the proposed dip-in fishery will be 2,000 chinook. The season will be a maximum of six scheduled days (two days per week for 3

successive weeks). The season will **NOT** be extended for any reason.

- S **All** fish must be landed by participating fishing vessels at the Tokeland Marina and sampled by WDFW staff prior to sale or ‘take-home’. In addition, tissue samples from at least 100 chinook must be taken for later GSI analysis for stock composition.
- S Fishers must notify WDFW in advance of the season of their intent to participate in the fishery. Fishers must notify WDFW at least 24 hours in advance of their intent to fish on a given day. Fishers must be willing to take WDFW observers when participating in these openings.
- S Fishing area will be limited to Area 2G west of a true north-south line through channel marker 8 and east of the rock jetty at washaway beach and excluding the area southerly and easterly of a line from Island Sands Light to Ramsey Point.
- S Fishery will be a targeted ‘chinook’ fishery with 8 1/2 inch maximum stretch mesh restriction. Sturgeon retention will be allowed within annual commercial harvest ceiling for white sturgeon.

Sturgeon Fishery Objectives

- Manage Willapa sturgeon harvest consistent with conservation guidelines in the Fish and Wildlife Commission’s policy on Lower Columbia River sturgeon.
- The 2002 Willapa fishery intent will be to manage for a total allowable annual commercial and recreational harvest of 2,348 white sturgeon (in “recreational equivalents”) [*Note: The harvest ceiling of 2,348 white sturgeon in recreational equivalents translates to an actual total catch ceiling of about 2,200 white sturgeon, or the rounded mid-point between the ceiling expressed in recreational equivalents and the entire catch expressed in commercial fishery equivalents (2,074 fish).*]
- S The 2002 Willapa harvest ceiling of 2,348 white sturgeon “*recreational equivalents*” is based on the 1988-96 average percentage that Willapa Bay white sturgeon harvest represented when compared to the total lower Columbia River harvest (in recreational equivalents) of white sturgeon. This percentage - 4% (3.87% rounded to the nearest 0.5%) - was applied to the number of lower Columbia recreational equivalents - 58,700 - that equates to the 2000-2002 annual harvest ceiling recently adopted by ODFW and WDFW. The lower Columbia River harvest ceiling in terms of actual catch is 50,000 total white sturgeon, or 10,000 commercial and 40,000 recreational catch.
- Constituents offered a number of proposals for commercial and recreational fishery

sharing of the total allowable sturgeon harvest in 2000, including: historic sharing, 80:20 recreational to commercial (based on Columbia River decision), a year-round recreational fishery, and 50:50 sharing. Without establishing any specific sharing principles for the future, WDFW will maintain a management intent for the 2002 Willapa white sturgeon fisheries that equally shares the impacts between the commercial and recreational fisheries, as follows:

- S 1,037 commercial fishery white sturgeon harvest ceiling (translated from 1,174 “recreational equivalents”).
- S Commercial harvest opportunity will occur during any salmon fisheries from July 22 through October; and target sturgeon fishing may occur in November with 9 inch stretch minimum mesh size, if there are sufficient numbers remaining compared to the harvest ceiling.
- The following changes implemented in the 2000 Willapa recreational sturgeon fishery, compared to 1999, will be continued in 2002:
 - S Oversized sturgeon cannot be removed in total or in part from the water - the intent of this regulation is to eliminate the practice of anglers hauling out an oversized sturgeon for a “trophy photo” before it is released.
 - S WDFW is using the 1995-98 average catch - or 1,156 white sturgeon - as an expectation for the 2001 recreational fishery but the actual catch could be somewhat lower or higher - any recreational catch that might occur in excess of the upper end of expectations will not be used as a rationale to “penalize” commercial catches in future years.
 - S Release of green sturgeon will be required as an in-season management measure **if** conservation measures are recommended following an assessment of these southern Oregon and northern California origin populations.

Other General Harvest Management Objectives

- The guidance from the Fish and Wildlife Commission’s 2002 North of Falcon Policy shall provide additional, general guidance for 2002 Willapa fishery planning. The Commission’s specific provisions for In-Season Management, Monitoring, Gear Conflict, and Incidental Mortalities are as follows:
 - S “When in-season management actions are taken, they should be implemented in a manner that is consistent with pre-season conservation and management objectives and fishery intent developed through the North of Falcon process.”

- S “Fishery participants will be required to comply with fishery monitoring and evaluation programs designed to account for species and population impacts.”
- S “Recreational and commercial fisheries shall be structured to minimize gear and other fishery conflicts. Unanticipated management issues identified in-season, including conflicts with fisheries directed at other species, shall be resolved by involving the appropriate sport and commercial representatives in a dispute resolution process managed by Department staff.”
- S “Limits on incidental mortalities of non-target species will be defined as necessary for commercial and recreational fisheries. Management regimes will include strategies to limit seabird mortalities consistent with the federal Migratory Bird Act.”

Proposed 2002 Management Steps

The following steps and approaches have been and will be followed for planning and managing 2002 Willapa fisheries:

Pre-Season

- Preseason forecasts were available by February 27 .
- Conducted regional meeting to present forecasts and gather additional input on Willapa Bay and Grays Harbor salmon fisheries. This year’s meeting was held at the South Bend Community Center on March 12 from 7-9 pm.
- North of Falcon meetings: Additional discussions were held with constituents at specifically scheduled times in Portland and SeaTac (March 20 and April 2, respectively) to reach decisions on Willapa Bay fisheries in 2002 .
- At the second North of Falcon meeting (April 2), Willapa Bay recreational and commercial seasons were established that allow for in-season changes as necessary based on updated run size information.
- Send written notice of proposed Willapa Bay commercial seasons to license holders and buyers by May 31.

In-Season Modifications to 2002 Plan

- Conduct one day commercial chinook gillnet fishery in **late** August to provide in-season update for chinook. The chinook in-season forecast model has been updated and revised to include the most recent years. Although the revised model appears to be more precise,

a positive bias in the model is still expected at low run sizes. Therefore, the updated runsize will be adjusted downward for fishery management purposes in 2002 to account for this bias. Commercial fishery management actions based on this information are outlined below:

- S If the unadjusted, predicted run is less than 20,000 (based on a one day catch less than 1,674 chinook) - additional fishery restrictions will be implemented to reduce chinook impacts.
- S If the unadjusted, predicted run is between 20,000 and 32,000 - no changes to the pre-season fishing schedule will occur based on expected chinook impacts.
- S If the unadjusted, predicted run is greater than 32,000 (based on a one day catch greater than 2,663 chinook) - additional harvest opportunity for chinook on 32.5% (allowable chinook harvest rate) of the increment above 32,000 will be provided.
- The allowable harvest of chinook in the commercial fishery will be specifically monitored in-season and adjustments to commercial openings may be made to ensure that actual harvest does not exceed allowable levels. Assuming the in-season update indicates no change in the pre-season chinook forecast, the commercial fishery will be managed to not exceed 5,744 Willapa origin chinook for the total season. In-season actions will be taken, if necessary, to ensure this target is not exceeded. These could include but are not limited to additional area closures and/or a reduction in the amount of fishing time (number of open hours and/or days).
- Buyers will be required to comply with “Quick Reporting” requirements to submit fish ticket information to the Department by 10:00 AM the day following the landing. The latter requirement will be in place for all commercial gillnet openings in Willapa Bay in 2002.
- The in-season run size update methods identified above are those that have been determined to provide reliable estimates of abundance. Other methods that have not been shown to be reliable or timely (e.g., spawning ground surveys) or other potentially new methods will not be used to update run sizes for in-season management of 2002 fisheries, unless new information or analysis demonstrates their utility prior to September 1, 2002. Any new methods would be discussed with the in-season management “review group” prior to their use. The Department does not anticipate finding any abundance update procedures useful in 2002 for coho and chum, but fishery information regarding species composition in various times and areas may be used to make in-season fishery adjustments.
- The recreational fishery will be managed with fixed seasons and bag limits tailored to pre-season run size expectations to the extent possible, with in-season adjustments only

occurring under serious conservation circumstances. This intent reflects the relatively small size and impact of the recreational fishery in Willapa Bay.

- Prior to implementing any in-season changes within Willapa Bay, WDFW will consult with designated representatives (as available) of commercial and recreational fisheries in Willapa Bay.